DEVOTED TO AGRICULTURE AND ALL ITS KINDRED ARTS AND SCIENCES.

Agriculture not only gives riches to a nation, but the only riches she can call her own.—JOHNSON.

VOL. II. SATURDAY, MARCH 30, 1850. NO. 7.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

DISEASES OF ANIMALS.

FEB. 14, at the agricultural meeting, Hon. Seth Sprague, of Duxbury, was called to the chair, and the above subject was discussed. Mr. Sprague remarked, that as there was a great want of skill in treating diseased animals, it was better to leave them to nature, than run the risk of injuring them by administering medicines injudiciously.

Dr. G. H. Dadd, veterinary surgeon, of Boston, said that he approved of the remarks of the chairman. He was in favor of a reformed practice in treating animals, instead of bleeding and other harsh modes, as had been the practice of the old school. He then read from a work which he was about to publish, showing the impropriety and the dangerous effects of bleeding, which had been practised to a great extent, and which was recommended generally in foreign works on this subject. He enumerated a large number of diseases for which bleeding was recommended; and he contended that as the principle of life was in the blood, the extraction of this fluid tended to death. Instead of this harsh and dangerous practice, means should be used to promote the general circulation of the blood, and produce an equilibrium over the whole system.

Col. Thayer, of Braintree, said that he had known cases in which he thought that bleeding was useful.

Mr. French, of Braintree, mentioned the case of a gentleman who was unwell, and wished to be bled; his physician refused; he was afterwards bled, and recovered.

Mr. Cole, of the N. E. Farmer, said that case of indisposition doubtless originated from too high living; and had the patient been abstinent, and lived a few days on gruel or other light diet, he would doubtless have recovered without the loss of blood. He said that we should depend on good management, as to pure water and air, wholesome food, protection from exposure, exercise or moderate labor, rather than medicine, to keep animals in a healthy condition. He agreed with Dr. Dadd, generally; bleeding was a harsh practice, usually unnecessary, and destructive to health. Frequently the modes of doctoring animals, and the powerful and harsh medicines given, would destroy healthy animals. Instead of this, mild means and safe medicines should be used. The restorative powers of nature are great, and when the animal is placed under favorable circumstances, it will generally recover.

Mr. Buckminster remarked that he liked the views of Dr. Dadd. He thought that medicines given to beasts generally do more harm than good. In most cases mild cathartics should be given, to keep the bowels open, and the patient left to nature.

Dr. Dadd made some further remarks on the general treatment of diseases, recommending mild and safe means, and the use of such simple medicines as may be found in the forests and the field.

Mr. Wm. Parker, of Boston, stated a case of a horse, in which bleeding seemed to give immediate relief.

Dr. Dadd thought horses *might* recover after bleeding, but that did not show that bleeding was useful.

Hon. Mr. Newell, of Essex county, thought bleeding was good in some cases.

Hon. Mr. Calhoun moved that the thanks of the meeting be presented to Dr. Edward Brooks, for the interesting lectures which he had given at preceding meetings, which vote was passed. And he said that this discussion convinced him of the importance of having an institution where more could be learned of the diseases of animals and their remedies.

DISEASES OF HORSES.

We have a communication recommending three grains of corrosive sublimate, and three grains of red precipitate, as a dose for a horse afflicted with the horse-ail, stating that a horse recovered after taking two doses; also recommending saltpetre, flour of sulphur, and antimony, for a cough from common cold and exposure.

There may be cases in which horses have a constitution sufficiently strong to withstand both disease and the effects of unfavorable medicines; but we regard all such powerful minerals, some of which are rank poisons, as dangerous, and liable to kill a well animal.

GRASSES.

March 22d, at the agricultural meeting, Mr. Calhoun in the chair, Mr. Buckminster, of the Ploughman, said that our principal grasses were herdsgrass, redtop, and clover. Some farmers were satisfied with these, but he thought that further experiments should be made on other grasses. Fowl meadow makes excellent hay for a change, but it soon runs out. This grass originated in Dedham. We want some grass adapted to wet lands.

Mr. Asa G. Sheldon, of Wilmington, said that herdsgrass and redtop were the best grasses on strong soils, but on light soils clover was more profitable. He thought that the time in which grass sheds its seed was a good season for sowing seed. It succeeds better than when sown in spring. He thought that two tons of hay to the acre were enough, and land that was rich enough to produce four tons to the acre, should be devoted to other crops.

Mr. Brooks, of Princeton, remarked that as a grass, clover was not so good as herdsgrass and redtop, but it was better for the land, as its tap root runs deep, and obtains nutriment from the subsoil. Herdsgrass was not an exhausting crop; he had mowed land eight years in succession, and yet it was in good condition for other crops. He had tried lucerne, and it failed. Fowl meadow dies out in a short time; it makes superior hay for working oxen in summer, as it is less heating than herdsgrass. It is excellent for milch cows for a month before calving, owing to its cooling properties. He found an advantage in feeding it to a heifer that was affected with the garget. He would raise fowl meadow as a medicine for stock. It succeeds better by cutting late, but the hay is not so good. He knew of no other grasses that were useful. Couch or witch grass is a great pest to the farmer, and of but little value for fodder. It may be killed in a few years by preventing its going to seed. Large crops of grass are not profitable. Two and a half tons to the acre are sufficient.

Mr. J. C. Gray said that he had not a variety of soil. His was rather heavy, and he found herdsgrass and redtop to be the most profitable; the former was the better variety. In curing clover there was considerable waste of the fine parts. He thought that white weed, or ox-eye daisy, as well as witch grass, should be cut before going to seed, in order to destroy it. As the former flourishes well only on poor soils, he thought it might be kept out of grass lands by good culture. He inquired what effect subsoiling had on grass crops.

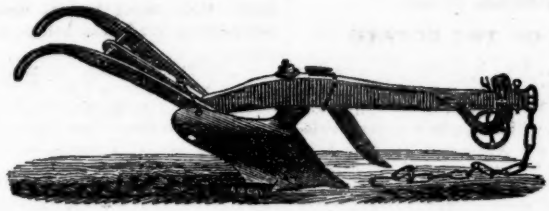
Mr. French, of Braintree, said that he had subsoiled about two acres of grass land, and it had a very favorable effect. When he had the care of the House of Industry, he sowed lucerne on a dry bank, and it did well. It is not adapted to clayey soil. Herdsgrass and redtop are our principal grasses. We generally keep our land too long in grass. Immediately after haying is a favorable season for ploughing grass land.

In making hay, it is best to haul it in in the heat of the day, also to rake up that which is not thoroughly made while the hot sun is on it. Then there will be time to mow after securing the hay, and the grass will be ready to receive the sun the next morning. As to the quantity of seed, he would sow half a bushel of herdsgrass and a bushel of redtop to the acre. He recommended sowing early in the fall. He had drained his salt marshes by making ditches thirty feet apart, three feet deep, and ten inches wide; these would nearly close at the top, but remain open at the bottom. By this mode both the quantity and quality of grasses were improved.

Mr. Cole, of the N. E. Farmer, said that Mr. Phinney and others had tried lucerne, but he knew of no one who continued its cultivation. It required land in high tilth, and as much culture the first year as a crop of beets or carrots, which would cost as much as the crop would be worth for a number of years. Fowl meadow will continue in the land if cut late, but the hay is not so good. This is the practice of those who raise this grass. He thought this grass was a native of different parts of the country. He had seen it years ago in new regions in Maine, and old people had long known it in the same location. [Mr. Brooks here remarked that it had been known in Princeton seventy-five years.] He thought clover had not been estimated sufficiently high. It made the best hay for sheep, colts, young cattle, and cows, and for horses not at labor, and for working cattle and horses he preferred part clover hay. Animals need a variety of food, and when feeding at large, they eat many grasses besides those cultivated, also numerous kinds of weeds and bushes. Herdsgrass and redtop abound with the same substance, silex or sand, taken up by solution, and which gives firmness to the stalk; but clover has less of this element, and more lime and other ingredients which may be essential to their health. Clover could be well made without waste, by putting it in heaps, after being partially dried, as the moisture will pass from the stems to the leaves, and it will soon dry on exposure to the air. By sowing grass seed thick, a large crop may be raised, and yet the hay be good and fine. He had raised three tons of excellent hay to the acre.

Hon. Moses Newell, of Essex county, said that he subsoiled a piece of land three years ago, and the crops were excellent, and they seemed to increase; the soil moist, but not so wet as to need draining. He had subsoiled gravelly loam, and found no benefit from it. He considered clover hay valuable.

Deacon Brooks Shattuck, of Bedford, N. H., said that he subsoiled a piece of grass land, leaving a part without this operation, for experiment, and the crop was considerably larger where the land was subsoiled, particularly last season, which was very dry. He considered clover a very valuable grass. A great account was made of it in his region. He had fed working horses one day on herdsgrass, and one day on clover, and so on alternately, and they preferred the clover, and worked as well on it. Clover could be made without waste, by making it partly in the heap, as had been suggested.



HILL-SIDE OR SWIVEL PLOUGH.

This plough is so constructed that the mould-board may be easily changed from one side to the other while the team is turning, which admirably adapts it to ploughing on hill sides, as all the furrows are turned down hill. It is superior for various other purposes, and may be used to advantage for all kinds of ploughing for which the common plough is used.

In ploughing on level land, furrows may be made in each direction, on the same side, saving the time required to pass from one side of a land to the other, and the disadvantage of the team passing frequently over land for that purpose, which is sometimes very injurious. By this mode of ploughing there is no dead furrow, which is often a serious inconvenience, so much so, that some neat farmers take up the slices of the first furrows, and place them into the dead furrows, to make the land level. Another disadvantage is avoided, which is the turning of two furrows together, in the beginning of a land, forming ridges. These prominences, contrasted with the depressions caused by the dead furrows, are not only unsightly, but very inconvenient, both in tillage and grass lands.

The hill-side plough is excellent for making roads, as the furrow-slice may be thrown to either side, as most convenient in constructing the road. It is also well adapted to ploughing by the side of fences or ditches, as the team may be kept close to them, and the furrow-slice thrown from them in passing either way.

Six or seven sizes of these ploughs are made, varying from the small, one-horse plough, up to the large, stout implement, suitable for a team of six or eight cattle, well adapted to breaking up rough, hard lands, or making roads upon an uneven surface, and with a soil filled with impediments. With a wheel and cutter, the hill-side plough makes smooth, even furrows.

AMERICAN FRUIT-BOOK.

As the season is at hand for attending to fruit trees, it may be well to call attention to the above book. It is not our design to recommend our own work, but we may be allowed to present the opinions of others. We copy the following from the Family Visitor, Cleveland, Ohio, by Professor Kirtland, senior editor of that valuable work. Prof. K. is one of the most distinguished pomologists and fruit-growers in the country.

"A Book for Every Body.—'The American Fruit-Book, containing Directions for Raising, Propagating, and Managing Fruit Trees, Shrubs, and Plants; with a Description of the best Varieties of Fruit, including new and valuable Kinds; Embellished and Illustrated with numerous Engravings of Fruits, Trees, Insects, Grafting, Budding, Training, &c. By S. W. Cole, Editor of the New England Farmer, and Author of the American Veterinarian.'

"This book is a neat duodecimo volume of two hundred and eighty-eight pages, so well got up that it faithfully fulfils all the promises held forth in its long and comprehensive title page.

"Its merits and value are justly estimated by one who was obliged to contend with the confusion and perplexities which surrounded the subject of fruits and their cultivation at the west for forty years, and almost up to the present time, with no other guides than Coxe and Forsyth.

"We take pleasure in recommending it to the public as a cheap and brief, but very perfect epitome of American fruit culture, including all the recent improvements and discoveries."

The following are a few of the commendatory remarks of F. K. Phœnix, Esq., a practical farmer and experienced nurseryman, who edits the horticultural department of the Wisconsin Farmer, a new and interesting periodical in the "far west."

"Mr. Cole has certainly approached far nearer the standard he has aimed at, than any other pomological author we are acquainted with. It is emphatically 'A Book for Every Body' — much in a small compass, and at a small price. To get up such a work, on a subject that has become so very much amplified and extended as pomology, and especially of late, required great condensation, to present any thing like a fair synopsis of it. But we think that, in the main, it has been ably done in the work before us."

Mr. P. in making an elaborate review of the whole work, says at the conclusion of his second chapter, "We cannot help unreservedly expressing our admiration at the skill and judgment, the decided ability manifested by the author, in executing his task."

One feature of this work is peculiar, as it is seldom met with in other books, which is, the naming the *defects*, as well as the *good qualities*, of fruits and trees. Intelligent fruit-growers have frequently remarked that the simple word *uncertain*, which occurs in the American Fruit-Book, would, had they seen it in previous works, have saved them, in several cases, an expense of fifteen or twenty dollars, in useless experiments on uncertain or variable fruits.

We have received hundreds of commendatory notices of this work from intelligent conductors of journals, and practical nurserymen, orchardists, and pomologists. But we need present no more, as our object is to call attention to the examination of the work.

For the New England Farmer.

CULTIVATION OF THE POTATO.

Mr. Cole: I have read with much pleasure the article upon "Potatoes," in your last number, from your correspondent, S. M. Stanley, Esq. The subject is an old one, upon which much has been written, and it seemed, a few years ago, as if nothing more need be, or could be, said about it. But since the potato has been attacked by an epidemic disease, it has required different management, and a greater amount of skill than before, in order to preserve the nicest varieties, and raise them in sufficient quantity for even home consumption. It is not my purpose, in the following remarks, to put forward a favorite theory upon the rot and its remedies, but rather simply to state by what means I have *always* succeeded in raising a full supply of sound potatoes, notwithstanding the disease that is abroad.

The first year that the rot showed itself in this section, I had planted three rows wide of potatoes around a cornfield of eight acres, which was well manured broadcast, with a compost of two parts muck to one of stable dung. The field was of quite broken surface, and the potatoes, in extending around it, encountered various qualities of loam. I had the curiosity to watch closely the effects of the epidemic on different parts of the land. Through the hollows, the soil was very rich, moist, (but not wet,) compact, and fine grained. Here the potatoes all rotted. Rising up from the hollows, the soil gradually became lighter, warmer, and more open, until on top of the knolls, it was either quite sandy or gravelly. So, too, the potatoes began to be gradually sounder, until on the warm open soil of the elevated portions of the field, they were almost entirely free from defect. Previous to this time, I had always chosen precisely the kind of soil of these hollows to grow potatoes in, and never failed of a large crop of fine quality.

In the fall, the potatoes were dug out, immediately picked up, and put into the cellar, with more or less moist dirt adhering to them, — as had been my previous custom. But they soon began to rot. In overhauling them, I found that all the way down, through the centre of the bin, they were more or less decayed; while those that rolled over towards the ends of the bin were all sound. The baskets were invariably emptied near the centre; the heap was of course the highest there, and the potatoes that rolled down to the ends of the bin, became free from dirt and moisture in so doing. As my bin was quite wide, and the accumulation of potatoes and dirt was the greatest in the centre, from always emptying the baskets there, I thought that healthful ventilation was thus prevented, and that was the reason they did not keep well.

From the lights of that year's experience, I was induced to think that by planting my potatoes on warm open soil, of moderate fertility, and by housing them in a dry state in the fall, and giving them proper ventilation after being housed, I should succeed in growing and keeping them sound. I selected my ground for the next crop accordingly. I planted a part of my seed in pasture land, covered with a thickly matted sward, and as the locality was unfavorable for getting on manure from the barn-yard, I simply put a handful of mixed plaster and ashes in each hill. The remainder of the seed was planted in a tillage field, which had been four years in grass, and which I manured well at planting time, from the barn-yard. The crop from the latter field was abundant, but not all sound. That from the pasture field was not so large as the other, but, beyond all comparison, of better quality. Not a single diseased potato was found, and their flavor and mealiness, when cooked, was remarkably fine. I was always aware that strong animal manure, applied to the potato crop, made the tubers a little unpleasant in taste.

In harvesting these potatoes, I was careful to choose a dry, sunny time, digging them out in the fore part, and picking them up in the latter part of the day, in order to get them into the cellar in a clean, dry state. I was also careful to sort out all diseased tubers from among the manured crop. I made a new bin, with a plank bottom raised up three or four inches from the cellar bottom, to prevent dampness; the sides of narrow boards, having a small space between them for ventilation; and the bin being, when done, about four feet wide. I put my potatoes into this bin in a dry, sound state, and they kept so through the winter. Now this may have been a needless precaution; but this I know, I have ever since pursued this course, and have not been troubled with rotten potatoes in my cellar. I have noticed that where a potato had at some time become slightly specked with rot, those specks would dry down, and the rest of the potato remain sound, provided it was placed in a dry, well-ventilated situation. I have also noticed that whenever I put potatoes in barrels, (which I sometimes do where I raise a few of some sort different from my main crop,) they are quite apt to get to sweating, and afterwards to show disease.

This year's experience confirmed my previous conclusions as to the proper soil and mode of harvesting and housing potatoes. I was further led to regard the effects of animal manure with suspicion, and my observation since would not lead me to advise the use of it, (certainly in large quantities,) until we shall have become pretty well rid of the epidemic that is now abroad. Ever since the experiments that have now been detailed, I have selected each year a warm, open, sandy or gravelly loam, bearing a rich thickly-matted sward. I find no land so favorable to the growth of *nice* potatoes, as good pasture. The land, by long lying to grass, becomes covered with a rich sward, whose roots intimately pervade the soil, forming a large mass of vegetable matter. This, when inverted by the plough, decomposes gradually beneath the surface, and furnishes a grateful and healthful food for the potato — a food far better for it, of late years, than strong animal manure.

I have had good success in growing this crop by applying a compost of muck and ashes, or muck and lime, the dressing being spread on the inverted furrows, and harrowed in. Three or four bushels of unleached ashes, or a bushel of fresh lime to a half cord of muck, is about the right proportion of parts for the compost; and they should be intimately mixed, so that the alkali may come in contact with *all* of the muck, thus neutralizing its acids. If lime is used, it is best to dry slake it, by sprinkling on just water enough for that purpose, and then mix it with the muck immediately, while it is yet warm. It will become diffused more uniformly through the heap if brought to a powder than if used in lumps, and its action will be equally as quick.

Last year I raised a fine crop of potatoes on a piece of pasture land, dressed with a compost of vegetable mould from the woodland, and lime. In August preceding, I dug up from the hollows of a wood-lot contiguous to the pasture, the leaves and mould there accumulated, and mixed the same with lime, in the proportion of a bushel of the latter to a half cord of the former. In the spring the mixture was spread on the inverted furrows, and the potatoes planted. The crop was abundant and sound, and the cooking qualities excellent.

With regard to the size of seed, I have never tried experiments with that precision that enables me to express an unqualified opinion. I will merely say,

that I prefer to use seed of full medium size to that of small potatoes, *thinking* that the crop will average of better size by so doing. I will say, confidently, that four or five stalks in a hill are better than more, and I adapt my seeding accordingly. I never use more than one half of a large potato in a hill for seed.

F. HOLBROOK.

BRATTLEBORO', VT., *March* 11, 1850.

For the New England Farmer.

NATIVE TREES, SHRUBS, AND PLANTS.

CULTIVATION OF NATIVE SHRUBS.

[Continued from p. 60.]

The Moose Wood is a beautiful small tree, and found in abundance on the high and rocky land adjoining the Magnolia Swamp in Gloucester. It is distinguished for its striped bark, the beauty of its opening buds in spring, its large, handsome leaves, and pendent fruit, and is of the easiest cultivation in any good soil.

The Swamp Pyrus, or June Berry, is a small tree or large shrub, found in low grounds, and blooming early in May. When in flower it possesses considerable beauty, and produces, in June, a small, pear-shaped fruit, of a sweet and pleasant taste, and is somewhat improved by cultivation. The June Berry belongs to the Apple family of trees and shrubs, and to which it is so nearly allied, that scions of the pear inserted into the stock of this shrub will grow and bear fruit. We have seen a Bartlett pear, of good size and quality, grown upon the stock of the June Berry. But we are inclined to think that pear-trees thus grown are short lived. From the early ripening of the fruit of the June Berry, and its sweet flavor, it is a favorite with birds and insects, and they generally appropriate all of it to their own use, some time before it is fully ripe. It is easily cultivated in any common garden soil.

The Witch Hazel is a large shrub, and very remarkable for putting forth its yellow flowers in November or December. Its forked branches were once much used for divining rods, in the discovery of the precious metals. Found on the borders of woods.

The Clethra is found on the margin of ponds, and exhibits its raceme of white fragrant flowers in August. It is a beautiful shrub, and will grow readily in a garden.

The Water Andromeda is a low evergreen shrub, found in this vicinity, on the borders of Cedar Pond, in Wenham. Linnæus has thrown a charm around this delicate and beautiful shrub, in his description of it, published in his tour in Lapland, where he there compares its flesh-colored corolla to the beauty of a fine female complexion. We have had it under cultivation for some time, and find that it requires protection in winter.

The Dwarf Cassandria is a low, evergreen shrub, distinguished for its copper-colored leaves, and showy vernal flowers. Found more common than the Andromeda, and requires the same protection in cultivation.

The Ink Berry is another low, evergreen shrub, of a handsome appearance, with flowers in the axils of the leaves, succeeded by black berries. It is usually found in wet swamps, but it may be seen on the margin of the Magnolia Swamp, in a comparatively dry and rocky soil. Under cultivation, it is well to give it protection in winter.

The Mountain Laurel, or Calico Bush, is a fine evergreen shrub, found in Gloucester, in the neighborhood of the Magnolia Swamp; it is rather difficult to cultivate in the garden; it probably requires a sandy, peat soil.

The Rhodora is a showy, early flowering shrub, found in low, wet grounds; the flowers, which are purple, appear before the leaves.

The Swamp Pink is another of those shrubs, whose flowers are conspicuous in low grounds. It is a fine, sweet-scented shrub, and is remarkable for the excrescences found growing on its leaves; these are sometimes sought after by boys, and eaten, under the name of swamp apples.

The Climbing Staff Tree is a twining shrub, and should be cultivated for its fine effect upon a lawn, when permitted to climb a tree. When cultivated in a rich garden soil, its great luxuriance prevents its showing many of its bright orange-colored berries.

The Sea Groundsel Tree is a rare shrub here, and nowhere discovered as yet in this state, except those plants found last year at Nantucket, by Prof. John L. Russell. It attains with us, under cultivation, a height of four feet in a season, and with all the protection we have as yet been able to afford it, it dies down to the ground every winter; but it appears again in the spring, like a perennial plant, brings forth its flowers in September, which are succeeded by its silky seeds late in autumn.

The Magnolia Glauca is found in a swamp, near the road leading from Manchester to Gloucester Harbor. We have been informed that it was first discovered, many years since, by Judge Parsons, who showed it to Dr. Cutler, of Hamilton, with a request that he would give him the name of the plant. The doctor informed his friend that he had seen it at the south, and it was there called the Beaver-Tree, or Magnolia Glauca, and expressed great pleasure, as well as surprise, that so rare and beautiful a plant was found in his neighborhood.

It is well known, in this vicinity, as an elegant shrub, of difficult cultivation when taken from the swamp where it grows. It is said to succeed better when obtained from seed sown in a sandy, peat soil. The plants should be sheltered from high winds, and the roots well mulched.

The Cow Berry, a very rare woody plant, is found in North Danvers, and is distinguished for its fine evergreen leaves, its pretty pink flowers, and small red acid fruit. It is found in a dry soil, of easy culture, and may prove worthy of cultivation for its fruit, as it can be used like the cranberry, which it much resembles.

The Twin Flower is a small, creeping plant, with a woody stem, and is to be found in the greatest abundance in Gloucester woods. The flowers of this plant are white, and growing in pairs, with a drooping habit, of a singularly modest appearance, and possessing some fragrance. This plant possesses considerable interest, from its being discovered by Linnæus, more than one hundred years ago, in Lapland; and he was pleased to name it Linnæ Borealis, in honor of himself. It has, like the Cow Berry, a delicate fibrous root, that requires protection in winter.

There are several other native shrubs worthy of notice, that we must omit, for we have not yet forgotten that you require your correspondents to be brief. Our next article will be upon the cultivation of native trees.

S. P. FOWLER.

DANVERS NEW MILLS, *Feb.* 4, 1850.

For the New England Farmer.

CULTIVATION OF THE GOOSEBERRY.

MR. COLE. Sir: Much has been said and written concerning the Gooseberry, the cause of its disease, the mildew, and its cure. Strong soap-suds, and lye made of potash, have been recommended, both of which are useful in keeping the moss from the trees, and giving them a healthy appearance; but the only

effectual remedy for the blight upon the berry, that I know of, is transplanting. It had been the practice of my late husband, for the last eighteen years of his life, to transplant one third of his gooseberry-trees annually. The first thing done in the garden, as soon as the frost was out of the ground in the spring, was to prepare a piece of ground *very rich*, (as no other shrub requires, or will even bear, so much manure as the gooseberry,) take up the trees designed for transplanting, take off the shoots that had grown up around the trunk, and the trees planted out in the newly-prepared ground; the trees were set as near as possible the same depth that they had stood before, and when the holes were partly filled with earth, water poured in to settle it closely around the roots; then filled up, and the earth pressed down firm with the feet. If the work was well done, the fruit was *pretty* good the first year, splendid the second, and by the third it generally began to wane; but by adhering to the above-named plan, he was able to have an annual supply of perfect and delicious fruit. He had some old trees that had been transplanted as many as eight times, and it had become so much a matter of course, that they seemed to have prepared for it; their roots had become interwoven like mats, and so flat on the bottom, that when taken out of the ground they would stand erect upon its surface without support. If the shoots could be taken off with a little root attached, they would live, and make new trees, if well planted out.

As the gooseberry thrives best in moist situations and climates, and as a few hours' exposure to the hot sun at midday, in our climate, frequently scorches the fruit so as to make it drop from the tree, or become insipid, shaded situations are recommended; and the general remark is, that the shade of buildings or fences are preferable; but I take the liberty to press the subject, that it should always be an artificial shade, if any — for in dry seasons, large trees, whose roots strike deep into the earth, will of course absorb all the moisture, and leave the more feeble shrubs in their neighborhood to perish.

Respectfully,
MRS. NOYES DARLING.

New Haven, Conn., *March* 15, 1850.

For the New England Farmer.

AGRICULTURAL EDUCATION.

Mr. Cole: I have noticed with interest the discussions on the great subject of a contemplated agricultural school, as those proceedings have been faithfully recorded in your valuable paper. Since this subject is discussed, — since, moreover, that no two persons ever *saw* the same subject in *exactly* the same light, — an individual of even narrow and contracted views *may* suggest something of some importance by proclaiming his views, whatever they may be. I think an agricultural education can hardly be called a new thing even in this country, for it is a fact, and a happy one too, that the greatest portion of New England's rural students are acquiring the abovementioned kind of education on their own or their fathers' farms; and they are doing it in such a manner, that they never can forget the *rules*, that is, by practice and experience.

An agricultural school was established at Hofwyl, in Switzerland, by a certain philanthropic gentleman, which combined manual labor and the improvement of the mind; but there is a class of people in all European countries — the peasantry — who are in a servile state, and it is a very easy matter to better their condition; but there are none in this free country who will acknowledge themselves to be peasants. If all the students of such school could be of the same stamp, that is, indigent students, the plan would be far more practicable; but manual labor has always been despised, or at least underrated, by the majority of students, wherever it has been adopted in our schools.

I can conceive of no better plan to instruct *generally* the young agriculturists (and old ones too) of our country, than by means of *good* agricultural papers; and such I believe there are. Instruction is given in this way in a general and widely-diffused manner; all can choose or refuse, at their option. The instructors (the editors) are, or ought to be, learned men, who have theory and practice combined; who understand botany, chemistry, geology, &c.; the nature of domestic animals; the nature of various soils, and the proper manures for them; the proper manner of cultivating fruit trees; the manner of constructing drains and ditches, barns, and rural dwellings; who can baffle the diseases of our domestic animals, and all the ills incident to the farm except the potato rot, which we can hardly ask of any editor.

With such a one (and I have not named half his requisite good qualities) to manage an agricultural paper, and means to diffuse them, bearing intelligence to every part of the country, cannot the mechanic who is disgusted with his trade, learn whether he must plant corn two, three, or ten feet asunder, in hills, drills, or broadcast? Every farmer can afford to take an agricultural newspaper, but the indigent cannot afford their sons a scientific education, which is necessary for the gentleman farmer, laying aside the great disinclination to unite manual labor and study; and the latter is not so unreasonable after all, for I know by experience that it is difficult to study when fatigued by labor, and generally it is unprofitable to do more than one thing at a time. Yours, W.

Middlebury College, Vt., *Feb.* 22, 1850.

Remarks. — Our correspondent should give the greater part of the credit for a good agricultural paper to the correspondents, for they are numerous, and many heads are better than one. They are among the very best farmers in the country, and it is a peculiar trait of American farmers to freely communicate the result of their experience, instead of keeping it secret for the purpose of monopolizing the advantages of discoveries and improvements. — Ed.

For the New England Farmer.

EFFECTS OF THE BARBERRY ON GRAIN CROPS.

S. W. Cole, Esq. Dear Sir: My attention has lately been called to correspondence in your valuable paper, respecting the barberry bush, and the injurious effects it has upon the wheat crop. I write to obtain from you any facts that may have come to your knowledge, in reference to its injurious effects on wheat crops.

Have there been any suits at law growing out of their having been destroyed, or otherwise? We have some of these bushes in this county, which causes considerable anxiety on the subject; and at the request of Mr. T. Whitson, and others formerly of your city, I write you this, trusting that we may have your views, &c., at length on the subject, as soon as convenient after the receipt of this; and oblige, very respectfully,

Yours, &c.,
R. C. VAN RENSSELAER.

Little Fort, Lake Co., Ill., *Jan.* 23, 1850.

Remarks. — As to our own experience on this

subject, we have known cases of the barberry growing in the midst of wheat and other grain crops without any injury to the grain, and it is our opinion that the barberry has no unfavorable effect on grain; but as there is so much evidence to the contrary, we are not confident in this opinion; but we regard it as a doubtful subject, that should be more thoroughly investigated, rather than as a settled point.

A great deal has been said on both sides of this question, and no small amount of evidence has been offered in support of either side; but the largest amount of testimony, and that of a most positive character, goes to show that barberry bushes have no unfavorable influence on grain crops around them. Still we want more experiments to settle this question, and we should be pleased to receive facts that throw light upon it. — Ed.

For the New England Farmer.

MANAGEMENT AND PROFIT OF FOWLS.

Dear Sir: Since the exhibition of fowls last November, there has been great interest shown in regard to different breeds of hens and their management. It is a subject of more or less interest to every reader of your paper. Most persons are trying to obtain the largest hens. I think that small hens are much more profitable as layers. They will lay more eggs than those of the large breeds, and they can be kept at half the expense of those that are extremely large. My object is to obtain the hens that will yield the most eggs according to the expense. I have purchased a pair of Poland Top Knots, from which to raise stock for next year. They weigh about seven pounds to the pair.

I will now give you an account of my management the past winter. I kept twenty-five hens and a protector, of the native breed. My pullets that were hatched in April commenced laying in November, and those hatched in May began to lay in December. I have not kept an account of the number of eggs they laid during the winter. The first week in January they laid ninety-one eggs. In the first two weeks in February, they laid one hundred and ninety-two eggs. I sold the eggs at fifteen cents per dozen, and during the winter the cost of keeping the hens was only equal to two fifths the value of the eggs.

I give my hens corn and cob meal every day, mixed in milk or hot water. I kept corn, barley, and oats by them all the time; I also kept by them ashes, lime, and oyster-shells. Raw meat was given to them every day; I kept all the egg-shells during the summer, and gave them to the hens in the winter. I keep my hens in a house twenty by fifteen feet, with a large window in the south side. I find no difficulty in making my hens lay in winter; most people fail by neglecting to supply animal food, as a substitute for the numerous insects which they devour in summer.

Hens should be let out a few hours during the day, when the ground is bare. The best layers should be selected as breeders, and the protector changed every year. Grain should be kept by hens at all times during the year. The principal reason that some farmers find no profit in keeping hens, is because they only half feed them; therefore they are always in mischief, scratching for food. When farmers plant corn, they should give their hens a good supply, and they will not scratch it up. If hens are well managed, they afford more net profit than any other stock. Young hens should always be kept over, as they will lay better in winter than old hens.

NOAH W. HARDY.

Nelson, N. H., *March* 5, 1850.

From Mr. Williams's Address before the Kalamazoo Co. Agricultural Society.

DO YOU LOVE GOOD FRUIT?

As it is with the animals and vegetables, so it is with fruits. You can have stinted, astringent, crabbed fruits, or the most delicious. The precaution to send your neighbor's boy the slip of a shoot from a fine tree, while you are stopping to decide the affairs of the nation with him — a few moments taken to slide it under the bark, while you are waiting for a meal at home — will transform a useless shoot into a valuable tree, that shall furnish pleasure and nutriment to generations of men. A few minutes improved now and then, which would otherwise be idled away, will surround your dwelling with a grove, which shall prove of the greatest utility, and a delightful embellishment. I know men say they have no time, yet I have always observed that the men who make this excuse, have plenty of time to lounge at the tavern; plenty of time to run after some mountebank or charlatan; plenty of time to litigate with a neighbor. No, man! plant the tree. It will grow while you sleep. Bud it — graft it — nurse it — and it shall gladden the sight and please the palate of people unborn, and you shall leave a memorial of your existence, springing from the green sod, when you repose beneath it.

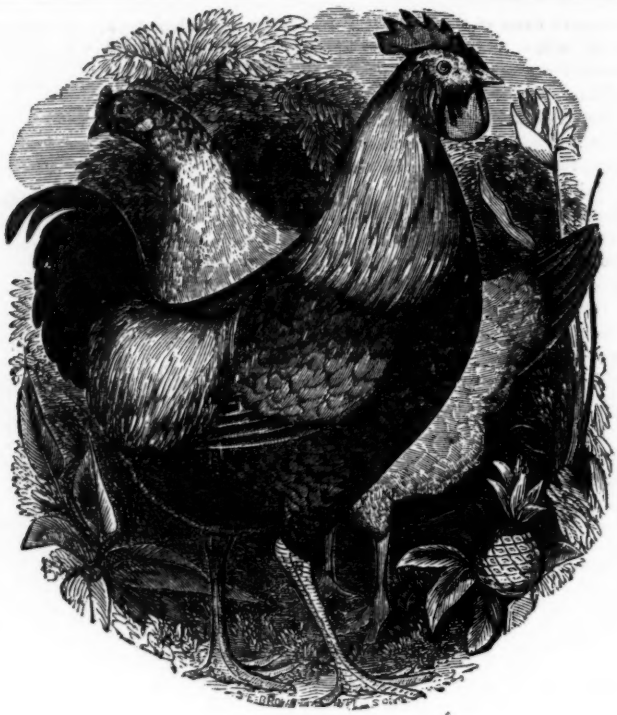
Some five or six years ago, I found, on the place where I reside, some scrubs of natural fruit. The tops of the trees, my neighbors said, were too large to graft. But they were grafted with considerable labor. My predecessors might have budded or grafted each with a single germ, and saved me nineteen twentieths of the time and expense. Another set of men told me the country was not natural for fruit. I put in the grafts, and for years have had abundance of delicious fruit for the table or cookery, for myself and my neighbors, in summer, fall, and winter; and I find none will eat it more greedily than those who have no time to graft their own trees, and who curse the climate as unfit for fruit. — *Literary Gazette.*

THE CHRYSANTHEMUM IN CHINA.

The Chrysanthemum is the Chinese gardener's favorite flower. There is no other with which he takes so much pains, or which he cultivates so well. His Camellias, Azaleas, and Roses, are well grown and well bloomed, but with all these we beat him in England; in the cultivation of the Chrysanthemum, however, he stands unrivalled. The plants themselves seem, as it were, to meet him half way, and grow just as he pleases; sometimes I met with them trained in the form of animals, such as horses and deer, and at other times they were made to resemble the pagodas so common in the country. They are always in high health, and never fail to bloom most profusely in the autumn and winter. — *Gard. Chron.*

The French Academy, after discussing the new dictionary of the national tongue during the last nine years, have not yet completed the letter A.

Resolve to perform what you ought; perform without failure what you resolve.



COCHIN CHINA FOWLS.

For the New England Farmer.

The portraits of these fowls were delineated and engraved by Mr. S. E. Brown, from a pair now in the possession of, and recently imported by, George P. Burnham, Esq., of Roxbury, Mass. These fowls are descendants of the pair exhibited by her majesty at Dublin Cattle show, in 1846–7, and afterwards presented to Lord Heytsbury, then the lord lieutenant of Ireland.

The fowls imported by Mr. Burnham are quite young, and have suffered greatly from neglect while on the voyage from England, having been nearly starved; so much did they suffer for want of attention and food, that they lost in weight nearly two pounds apiece, and when landed were filthy beyond conception.

Notwithstanding these disadvantages, Mr. Burnham consented that the drawing should be made; and the engraving shows the fowls as they appeared on the 20th day of February, 1850 — angular from leanness, not fully feathered, and their form imperfectly developed for want of maturity. The writer had preconceived opinions as regarded this breed of fowls, and was fully confident, that in this case, the truth of the adage, "the king's chaff is better than other people's corn," would be fully verified. In this he was disappointed. The fowls show many good points, and exhibit much beauty of form and outline, and will, without doubt, prove a very valuable breed. That they are hardy, and capable of bearing privations, they have given incontestable proofs. They were landed January 26, 1850, and the pullet began to lay on the 11th day of February. The eggs are not nankeen-colored, as are the eggs of the Shanghae, but are flesh-colored, and are quite large.

The comb and wattles of both cock and pullet are imperfectly developed; the hackles on the neck of the cock are not fully grown, and the feathers of the tail have not yet appeared; a few plumes only are seen. The feathers on the body and breast indicate that the prevailing color will be a brilliant black, intermixed with dark buff or orange. The color of the hen is a bright orange, each feather being marked with a single bar of black. The legs of both sexes are smooth, and of a yellow color. When these fowls shall have arrived at maturity, they will exhibit a beauty of form and a splendor of plumage not equalled by any other breed; and in weight of body will not be surpassed by the Chittagong or Shanghae breeds.

Subjoined is a letter received from Mr. Burnham:

Dear Sir: In accordance with your request for a description of my Royal Cochin China fowls, I would say, that they were imported in January, 1850, from the establishment of J. Joseph Nolan, Esq., of Dublin; and were hatched in July and August, 1849. On the 20th of March, I find the cocks to weigh, one nine pounds, the other eight and a half, light. The pullets weigh, on the average, eight pounds, and are now laying, all of them.

The importation consists of six fowls — two cocks and four pullets. The color of the male birds is red and brown, or black and brown; that of the hens is a yellowish brown, generally, the feathers being barred and tipped with black. The form of these fowls resembles that of our best bred Shanghaes, and my opinion strengthens with a further acquaintance with both, that the two varieties sprung from the same original stock. My Cochin Chinas are clean-legged, the Shanghaes are, as you are aware, *feathered* upon the legs.

I have found these birds very prolific as layers, and

I believe they cannot be excelled by any breed known, in this respect. One of my pullets commenced laying in seventeen days after arrival, and in thirty-two days laid twenty-eight eggs; five of the number weighing nearly a quarter of a pound each, and measuring seven and a half by six and a quarter inches each in circumference. She showed but slight inclination to sit, and is now laying a second litter, after a recess of six days only. Two others have laid over twenty eggs each, and the fourth nearly as many. They have proved very hardy thus far, never having shown a sign of illness as yet. From two of the hens I have had thirteen eggs, such as I have described above, seven of which have been exhibited in Boston. The others have been set from time to time, two have been hatched, the rest are due.

The color of the plumage of these fowls is very even, comparatively, for parti-colored birds; the legs are generally yellow, though one or two of them are darker than the rest, as are the feathers also. The combs are small, small wattles, and small head; the eye is unusually large and bright. At full maturity, that is to say, after the second moult, I do not doubt that a cock and hen of this breed will weigh over twenty pounds; this is *large* enough for all useful purposes.

I have been fortunate thus far, too, with their chickens. I have set some thirty of their eggs, out of which I have now coming up nearly twenty thrifty chicks; which are very even in color and general characteristics. How fine these birds will prove ultimately, remains yet to be determined. I am daily better pleased with them, however, and they have been universally admired by those who have seen them.

In reference to the artist who has pictured them for you — Mr. Brown — allow me to say that he has done full justice to the fowls; the drawing is very faithful, and the proof you kindly sent me is a good picture. I am yours, &c., GEO. P. BURNHAM.

Roxbury, Mass., *March* 22, 1850.

Mr. Burnham is entitled to the honor of being the first to import this most valuable breed of fowls into this section of the United States; and these fowls do great credit to their breeder, Mr. J. Joseph Nolan, No. 33 Bachelor's Walk, Dublin, Ireland. Mr. Nolan has the reputation of being one of the most successful and scientific fanciers in the kingdom of Great Britain.

By thus speaking of Mr. Nolan, the writer does not intend to convey the idea that he is a breeder of poultry for sale. Mr. Nolan is actuated by a commendable spirit of emulation, and has competed successfully with Royalty itself, in the various shows held in the kingdom of Great Britain.

The difficulties attending the procuring thoroughbred fowls from abroad, are so great as to deter most persons from attempting to import them. Many instances have occurred within the writer's knowledge, where orders having been executed by the officers or agents of vessels from the United States — the fowls procured have proved worthless, and have been the cause of much chagrin and vexation, although every precaution had been used by the parties to whom the fulfilment of the orders had been intrusted, to procure the wished for breeds of fowls.

The writer believes the collection of Mr. Nolan contains every known breed of fowls, and each race is preserved and bred by him in the utmost purity; and any fowls procured from Mr. Nolan, without the intervention of any go-between, will be thoroughbred, and superior specimens of the race to which they belong, as he is a gentleman in whose integrity the utmost confidence can be placed.

Yours, &c.,
S. BRADFORD MORSE, JR.

Note. — A pair of the Royal Cochin Chinas, imported by Mr. Burnham, will be exhibited at the Agricultural Warehouse of Ruggles, Nourse, Mason, & Co., on Wednesday and Thursday next. — Ed.

SWEET POTATOES.

The following is Mr. Timothy A. Bascom's (of Hinsdale, N. H.) method of cultivating the sweet potato, of which he presented a fine specimen at the late Agricultural Fair: —

"There are many kinds of sweet potato, as of the Irish potato. The Mississippi yam is the best. Make your hot bed in April. Put in one foot of horse manure fresh from the stable. Cover it two inches deep with good loam. Place the potatoes in the loam one or two inches apart. Cover them one and one half or two inches deep. They will come up in two or three weeks. Care should be taken not to have the bed too hot or too cold. After they are two or three inches, they will do to set out. Place one hand on the potato to keep it from moving, and pull the sprouts off with the other hand close to the potato. The potato will continue to shoot out new sets of sprouts for three or four weeks. They will do well from the middle of May to the last of June.

"Place your sprouts in drills ten or twelve inches apart — a little deeper than they stood in the hot bed. Let the hill be a little dishing, to hold the water. If it is dry weather at the time of setting, water them as you would cabbages. Prepare the soil as soon as the frost is out and the ground is sufficiently dry. Plough or spade it to the depth of a foot or more — spread manure broadcast before ploughing — harrow and plough again before setting. Throw the ground into ridges by turning two furrows together. Set your sprouts on the top of the ridges. All that is necessary afterwards is to keep the weeds down. If you plough between the rows, plough *from* the hill the first time, and remove the dirt from the surface of the hill with the hoe. At the last hoeing, draw a little earth up to the hill, leaving the top a little hollowing to hold the water. Care should be taken not to leave the vines covered with earth, as in that case they will take root, which will prevent the growth of the first setting. Follow these directions, and you will have a good crop. They can be cultivated in any part of the Granite State as well as at the south. They will grow on any soil where corn will. I have tried them on different kinds — sandy loam is the best. I think they will be a good crop to raise for milch cows. They eat them greedily. I can raise double the quantity of sweet to any other kind of potato on the same ground."— *Vermont Chron.*

THE FARMER.

It does one's heart good to see a merry, round-faced farmer. So independent, and yet so free from vanity and pride. So rich, and yet so industrious — so patient and persevering in his calling, and yet so kind, social, and obliging. There are a thousand noble traits about his character. He is generally hospitable — eat and drink with him, and he won't set a mark on you, and sweat it out of you with double compound interest, as some people I know will; you are welcome. He will do you a kindness without expecting a return by way of compensation,— it is not so with every body. He is usually more honest and sincere, less disposed to deal in low and underhanded cunning, than many I could name. He gives to society its best support — is the firmest pillar that supports the edifice of government; he is the lord of nature. Look at him in his homespun and gray; laugh at him, if you will; but, believe me, he can laugh back, if he pleases.

Domestic Department.

ADVICE TO YOUNG LADIES. — The editress of the Literary Gazette, Mrs. Lydia Jane Pearson, in an article addressed to young ladies, upon the subject of marriage, discourses as follows: —

"Do not, as you value life and its comforts, marry a man who is naturally cruel. If he will wantonly torture a poor dumb dog, a cat, or even a snake, fly from him as you would from cholera. We would sooner see our daughter dying of cholera, than married to a cruel-hearted man. If his nature delights in torture, he will not spare his wife, or his helpless children. When we see a man practising cruelty on any poor helpless creature, or a fractious horse unmercifully, we write over against his name, *devil*, and shun him accordingly.

"We once knew a man, ay, a gentleman, who, during a ride for pleasure, became so demoniacally enraged at his horse, which refused to go, that he sprang from his carriage, drew his knife, and cut out an eye of the poor brute. The lady who accompanied him fainted, suffered a long nervous illness, and will never recover from the horror the outrage gave her. And we knew the young lady who, knowing this of him, was fool-hardy enough to become his wife. And we know how he tortured her; how he outraged all her feelings; how he delighted to destroy whatever she prized, or took pleasure in; how in his fits of passion he broke up her furniture, seized her by the shoulders, and shook her till she could not crawl to bed; how he beat her; how he kept her poor babe black and blue with blows and pinches until her parents took her home, and sheltered her from his cruelty.

"If you have a suitor whom you feel inclined to favor, look narrowly into the temper and disposition of the man. Love may soften it for a while, or it may induce him to restrain or disguise it, but be assured, the natural temper will remain, and the time will come, when your presence will be no restraint upon him. We have heard wives complain, 'I was so deceived in my husband; men are so deceitful,' &c. But we believe, in nine cases out of ten, these women deceived themselves. They suffered the romance of their own foolish heart to adorn their lover with all the excellences which their fancy attributed to a perfect manly character, and to draw a veil over all his vices and defects, which, if it did not conceal them, greatly softened or disguised their features.

"Men are not perfect — women are not perfect. In all cases, there must exist a necessity to bear and forbear, but it does not therefore follow that you should marry a bad man, knowing him to be a bad man. If you do so, you deserve chastisement; but a life-long misery is a terrible punishment. A bad man's wife must either live in a continual torment of fear, apprehension, and the bitter disappointment of her fruitless efforts to please; or she must become callous, cold, insensible to pain, and consequently to pleasure. Will you take upon yourselves either of these terrible alternatives? We hope not."

CUSTARDS WITHOUT EGGS. — One quart of new milk, four tablespoonfuls of flour, two of sugar. Season with nutmeg or cinnamon, and add salt to your liking. The milk should be placed over a quick fire, and when at the boiling point, the flour should be added, being previously stirred up in cold milk. As soon as thoroughly scalded, add the sugar, spice, and salt. This is an excellent dish, and deservedly prized by every one who has tried it.

Youth's Department.

BEWARE OF BEGINNINGS. — Young persons should, above all things, beware of beginnings, and by no means parley with temptations: their greatest security is in flight, and in the study to avoid all occasions of evil; for the cockatrice, which may be easily crushed in the egg, if suffered to hatch and grow up, will prove a deadly serpent, hard to be destroyed.

ADVICE TO YOUNG MEN. — Let the business of every one alone, and attend to your own. Don't buy what you don't want; use every hour to advantage, and study even to make leisure hours useful; think twice before you spend a shilling — remember you will have another to make for it; find recreation in looking after your business, and so your business will not be neglected in looking after recreation; buy low, sell fair, and take care of the profits; look over your books regularly, and if you find an error, trace it out; should a stroke of misfortune come upon you in trade, retrench — work harder, but never fly the track; confront difficulties with unflinching perseverance, and they will disappear at last; though you should even fall in the struggle, you will be honored; but shrink from the task, and you will be despised.

Health Department

HINTS TO THE BALD-HEADED. — According to the following extract from an editorial article in the Boston Medical and Surgical Journal, the easy and sure way to prevent baldness, is to go bare-headed, or wear a well-ventilated hat: —

"A refined civilization has brought with it a train of physical evils which it is in the province of science to control or subdue. Our tight hats, our warm rooms, closely fitting caps, silk nightcaps, from which the perspirable matter cannot escape, by their combined agency, in connection with other influences, not always easy to define, bring off the hair prematurely, and turn it gray, sooner than personal vanity is willing to exhibit such evidences of decay. And this is not all; the skin is actually in a low state of disease, the effects of which are recognized in the accumulation of dandruff — desquamation of the epidermis. The bulbs of the hair are inflamed also from the same cause, and from year to year the hair degenerates and becomes thinner, and not unfrequently ends in baldness. On all that part of the head not covered, viz., from the back side, between the ears, and on the temple, the hair generally remains to extreme old age, however much the apex may be denuded. If females wore equally tight covering, the hair would probably suffer very much in the same manner; but their light, airy bonnets admit of ventilation, and hence a bald-headed woman would be a phenomenon. Who ever saw a bald-headed Indian? We have had an opportunity of seeing various tribes, in all the freedom of an unrestrained savage life, but a sparse head of hair we have never noticed. Atmospheric exposure conduces to the luxuriance of the hair, and a healthful condition of the scalp."

DANDELION COFFEE. — Dr. Harrison, of Edinburgh, prefers dandelion coffee to that of Mocha, and many persons, all over the continent, prefer a mixture of

succory and coffee to coffee alone. Dig up the roots of dandelion, wash them well, but do not scrape them, dry them, cut them into the size of peas, and then roast them in an earthen pot, or coffee roaster of any kind. The great secret of good coffee is to have it fresh burnt and fresh ground. — *Cottage Gardening.*

Mechanics' Department, Arts, &c.

ASPHALTUM FOR COLORING WOOD WORK. — *Advantages of staining inside Wood Work of Dwellings, Stores, Offices, School Buildings, &c.* — Editor Ohio Cultivator: From recent investigations and experiments, I think it can be shown, that much expense may be avoided, a more durable finish obtained, and better effect produced, by *staining* with *asphaltum*, (*bitumen*,) and varnishing the inside wood work of dwellings, offices, stores, school buildings, and even churches, instead of painting in the ordinary mode.

To finish well inside (not the best) with plain painting, *three* coats are necessary; and then to preserve the paint, improve the effect, and render cleaning of the work more safe, two coats of varnish should be applied, unless the paint is white, and in that case it will have to be frequently repainted; and in either way, the work has but a dead, heavy, and monotonous appearance. Graining gives a pleasing expression, and is very durable; but it is expensive, and I suppose for that reason, is comparatively but little used. The staining process obviates the chief difficulty, (the expense,) and where the highest finish is not desired, may be substituted in most instances, where graining would be proper, particularly upon pine. It shows the grain of the wood with perfect distinctness, and in skilful hands the depth of the color and shading may be varied, so as to produce excellent effect with but very little trouble. Increasing or diminishing the quantity of asphaltum used, or rubbing off, or suffering the full coat of stain applied to remain on, are the means of varying the color; and it may be varied from the appearance of a finish of mere oil and varnish, to that of a dark shade of rose wood.

To prepare this staining matter, all that is needed is to dissolve the asphaltum (say two or three pounds to the gallon) in linseed oil, by boiling and stirring it; then add a small quantity of spirits of turpentine. (For inside work, painters usually apply oil and spirits turpentine in nearly equal parts.)

A coat of oil may be first applied, followed by the stain; or there may be two coats of stain, as may be preferred. But one coat of the staining matter, I think, will generally be found sufficient, and make a more agreeable finish. After the stain there should be two coats of varnish. Window sash may be finished in this way with very good effect.

From experiments which I have had made, and the opinions of experienced painters whom I have consulted, I doubt not that a given quantity of this staining matter would go much farther, and might be applied at less expense, than the same quantity of common paint. Lead ground in oil will mix twenty-five pounds to the gallon of oil, and dry lead sixteen pounds; and in three coat work, every superficial yard will require about one and a half pounds of paint. Asphaltum may be obtained at from eight to twelve cents per pound. I give these facts to assist those who wish to test the comparative expense of staining, with plain painting. Experienced painters here tell me that to oil, stain, and varnish two coats, would be about equal in expense to two coats of painting.

A room, the wood work of which is grained or stained in the manner proposed, is already more than half furnished, and needs no profusion of expensive furniture to complete the other half. Plainness and simplicity in furniture, in such a case, will answer, and in my humble opinion, give better effect, than *can* be produced where the finish is with white, or any other plain painting.

In Barnard's work on School Architecture, staining with asphaltum is highly recommended, and it seems to have been used in finishing the best school buildings in Boston. CHARLES W. HILL.

TOLEDO, *Feb.* 1850.

— *Ohio Cultivator.*

NAKED FALLOWS AND NAKED SOILS TEND TO STERILITY.

There is no doubt of the truth of this proposition. Any observing man who has travelled far, and observed carefully what was before him, cannot have failed to note this result. Occasionally old fields, or commons at the north, and whole plantations at the south, illustrate the assertion; while in ancient kingdoms, once world-wide renowned for fertility, as Palestine, large portions of Syria, Greece, Italy, and Spain, sterility now reigns supreme, where once the golden harvests waved in the richest profusion, and lowing herds and bleating flocks fattened on the luxuriant meadows and grassy hill-sides. A few years of bad cultivation, followed by abandonment of the naked surface to the elements, have wasted the remnant of fertility left by the last thriftless occupant. A little consideration will show the inevitable tendency of such management to similar results in our own country.

A soil judiciously cultivated, where all that is produced upon it is fed off upon the field; or the refuse vegetation, as of stalks and roots, after its consumption by man or animals; the offal of the finer portions, as of grain, the leguminous plants or farinaceous roots,— where these are carefully husbanded and returned to the soil, with the addition comparatively of a trifle in some of the essential mineral ingredients, as of plaster, lime, or salt, when they are deficient, the soil will be constantly improving. The reason of this is perfectly obvious. Vegetation draws no inconsiderable share of its carbon, which is between forty and fifty per cent. of its entire weight, from the carbonic acid of the atmosphere. This is stored up in the roots, stalks, and leaves; and if carried back to the soil and incorporated with it, tends greatly to augment its fertility. In fruits fed to man or animals, much of this carbon is converted into carbonic acid, and given again to the atmosphere by their respiration. Yet much of the carbon, and nearly all the salts, or mineral ingredients of the food, are retained in their fæces; and if these are applied to the field, they will be found to have improved, rather than deteriorated, the soil from which they had been taken.

It is the loss by the partial fermentation and decomposition of plants, grains, and grasses, in the curing and preparation for food, in addition to their large waste from respiration in the animal system, which renders the process of improvement by manuring with green crops (in which the whole product, as of oats, buckwheat, rye, clover, or cow peas, grown upon a field, is turned under by the plough) so much more speedy and efficient, than the slower, yet not less certain mode of restoring all the offal and manure derived from the crop to the soil where it has been grown. Even a small quantity of such mineral manures, as lime, plaster, salt, or bone-dust, has a tendency to absorb carbonic acid and ammonia; and by a small outlay, the fertility of the soil may

be greatly increased, and the loss of these fertilizers by respiration and perspiration, when they first pass through the animal system, before their residuum is given back to the soil, may be fully compensated.

One exception is to be admitted of the tendency of uncultivated fields to sterility. This is seen where they sustain a natural growth of vegetation, such as is exhibited in woodlands, prairies, and the spontaneous growth of other plants in tolerable profusion; for here the work of a self-sustaining fertility is constantly in operation. In all other cases, the rule holds true, and from this perfectly plain and obvious principle. If the soil be upturned and exposed to the sun, air, and rains, unsheltered by the kindly protection of its natural covering of vegetation, the oxygen from the air, and moisture it imbibes, stimulated by the sun's rays, acts upon the carbon of the soil, and converts it into carbonic acid; and this, finding no rootlets of plants to absorb and condense it, speedily escapes to the surface, where it mingles with the atmosphere, and is wafted thousands of miles from the spot of its origin. As they become soluble, the earthy salts, finding no plants to appropriate them, are soon washed out of their native bed by the drenching rains, and pass onward through rills, brooks, and rivers, to the mighty ocean, hopelessly beyond reach. Calcareous and aluminous soils are partial, and only partial, exceptions to this general result. They absorb a certain amount of these fertilizing salts and gases, while all beyond pass off into irreclaimable waste.

The relevancy of these principles is shown, by the devastations of numerous and once fertile cotton plantations in our Southern States. It was not the quantity of carbon and salts, (ash,) abstracted in the comparatively small proportion of lint, (pure cotton,) taken from the fields, although this, in a long series of years, would be considerable; but it is owing to the necessarily cleanly cultivation required by this crop, and the *nearly naked fallows* thereby exposed to the drenching rains and an almost tropical sun. No weeds nor grass must be suffered to grow where a good crop is to be secured; and the narrow strips, (rows,) of vegetable growth, which alone are suffered to usurp the field, except for the brief time when the crop is in full foliage, gives every facility for the escape of fertilizing matter through the action of the elements. Added to this, is the too frequent waste of the stalks, leaves, and seeds; the two former being often suffered to decay on the surface and gradually disappear from rains; and the latter succeeds, at a later period, the other portions of the plant; or if fed to cattle or swine, their manure is dropped in the roads or by the sides of gullies, where it soon follows the same channels.

A similar effect is produced from the constant cultivation of grain, tobacco, flax, and most other plants; and from their abstracting a greater amount of the fertilizing elements to give them maturity, than are taken out of the soil by cotton, this result is sooner reached.

What is the remedy for this? is the very pertinent inquiry. There are but three, and one or more of these must be applied, or sterility is inevitable. The fields must have a frequent rotation of grass, clover, or some of the forage plants fed off, where grown, by animals, and their droppings left to fertilize the surface; they must be restored by green crops ploughed in, as of clover, cow pea, or other crops, or they must be manured from the cattle yard, or its equivalent in mineral and vegetable manures. Each of these modes has been often treated of in our preceding volumes, and they will continue to be noticed in all their varying phases and merits in the succeeding ones. — *Am. Agriculturist.*

He is unfit to rule others who cannot rule himself.

USEFUL KNOWLEDGE IN AGRICULTURE.

Every practical man well knows that almost any kind of soil, using the term soil as applying to single farms or small patches of territory, bears a certain kind of weeds, which tell, in language not to be misunderstood, whether the soil is stiff or light, wet or dry; whether it is easily or hardly tilled, what kind of husbandry is suited to it, what kind has been adopted. The lecturer could furnish a long list of the names of plants going to prove this. Now, this kind of knowledge comes directly home to every practical farmer, and it can be shown in a brief manner in what view this knowledge is most desirable to him. The weeds determine the method of cultivation, from the ease or difficulty with which the farmer can remove or eradicate them. If they are annual, once cutting them down will effect the desired object; if biennial, they must be frequently cut down; once or twice doing it will not eradicate them. It is important, also, to know something of the nature of the seeds; whether they easily rot, or whether, being covered with a scaly coating, they will retain the principle of vitality for a long period. The farmer must also ascertain whether the weeds are those which propagate by their roots; because, if they do, merely tearing them from the soil will not destroy them.

Microscopic examination of plants is of the very greatest importance to the agriculturist. Smut affects, it is well known, many varieties of our grain now: this smut is proved to be a minute vegetable substance, and this proof is obtained only through a microscopic examination. Rye is affected with ergot; growing with it and being ground up with it, it has caused, at times, the most alarming sickness, and has resulted in death; it is now used as one of our most powerful medicines. It has been ascertained *recently*, that the same fungus attaches itself to different varieties of grass, and springs up under much the same conditions that the ergot does upon the rye. It makes its appearance in cold, wet lands, or when an excessively wet season is followed by a hot, dry summer. When this grass grows, it has been long known that cattle will not thrive; in some seasons it has been impossible to raise a single calf. Attention was called to the grass from a knowledge of the effects of ergot upon the system. Thus it will be seen how important is a *minute* investigation of matters pertaining to the art of agriculture. The remedy in the case of grass would be to thoroughly drain the soil, and thus to kill off the rank, coarse vegetation. And this general remedy should be applied for the rust and mildew, though special remedies may be adapted to special localities. Drainage not only removes the water, but renders the air drier. — *Prof. Johnson.*

HOW TO SUBDUE A VICIOUS HORSE.

The following fact occurred in the city of New York a few days ago. A beautiful and high-spirited horse would never allow a shoe to be put on his feet, or any person to handle his feet, without a resort to every species of power and means to control him. At one time he was nearly crippled by being put in the stocks; he was afterwards thrown down and fettered; at another time, one of our most experienced horse-shoers was unable to manage him, by the aid of as many hands as could approach. In an attempt to shoe this horse yesterday, he resisted all efforts, kicked aside every thing but an anvil, and came near killing himself against that, and finally was brought back to his stable unshod. This was his only defect; in all other respects he is gentle, and perfectly docile, especially in harness. But this defect was just on

the eve of consigning him to the plough, where he might work barefoot, when, by mere accident, an officer in our service, lately returned from Mexico, was passing, and being made acquainted with the difficulty, applied a complete remedy by the following simple process: He took a cord about the size of a common bed-cord, put it in the mouth of the horse like a bit, and tied it tightly on the top of the animal's head, passing his left ear under the string, not painfully tight, but tight enough to keep the ear down, and the cord in its place. This done, he patted the horse gently on the side of the head, and commanded him to follow, and instantly the horse obeyed, perfectly subdued, and as gentle as a well-trained dog, suffering his feet to be lifted with entire impunity, and acting in all respects like an old stager. That simple string thus tied, made him at once as docile and obedient as any one could desire. The gentleman who furnished this exceedingly simple means of subduing a very dangerous propensity, intimated that it is practised in Mexico and South America in the management of wild horses. Be this as it may, he deserves the thanks of all owners of such horses, and especially the thanks of those whose business it may be to shoe or groom the animals. — *Selected.*

UTILITY OF INDIAN CORN.

But what gives to Indian corn its great importance, is the actual amount of nutritive matter which it contains. It is said to be third in this respect, wheat and rice containing a somewhat greater amount, though many place maize second only to wheat. We have the analysis of Indian corn, which may be given as follows: —

Silica,	38.45
Potassa,	19.51
Phos. of Lime,	17.17
Phos. of Magnesia,	13.83
Phos. of Potassa,	2.24
Carbonate of Lime,	2.50
Carb. of Magnesia,	2.16
Sulph. of Lime and Magnesia,	.79
Silica, mechanically found,	1.70
Alumina and loss,	1.65 — 100

making in all one hundred parts. In other words, we may say, on the authority of Dr. Dana, of Lowell, there are in it, of

Fat-forming principles, gums, &c.,	88.43
Flesh-forming principles, gluten, &c.,	1.26
Water,	9.00
Salts,	1.31 — 100

A glance will show how greatly the fat-forming principles predominate in the one hundred parts. There is hardly any grain which yields so much for the support of animal life. The difficulties and contingencies of raising wheat in the eastern parts of Massachusetts have discouraged its cultivation, so that we may say that Indian corn is by far the most profitable crop, especially as, when the offal is properly managed, there is no grain which restores so much to the ground. It is a fact, too, that it may be cultivated longer in succession than any other grain; and if kept dry, it may be preserved for an indefinite period without injury. The ease and rapidity with which it recovers from a drought is truly remarkable. Many predicted, during the last summer, that the corn crop would be destroyed. The leaves were badly curled, and there was every indication that the crop would greatly suffer. Every one remembers how speedy was its recovery, and how rapid its growth after the change of weather.

As a fattener for cattle, swine, and poultry, we may say that Indian corn is unrivalled in utility. The analysis of Dr. Dana, as given above, is sufficient to show, at once, how important it is for such purposes. As a food for man, it is extensively used, though by some thought to be too stimulating. — *Flint's Essay in Essex Ag. Transactions.*

A HINT ON A PRACTICAL SUBJECT.

I have always felt a deep interest in the discussions of "Deep *vs.* Shallow Ploughing," which have of late been had in your useful paper. I cannot bring myself to believe that any practical farmer would seriously advocate the system of shallow ploughing, where wheat and corn are the staple crops. It is, to me, such an absurd theory, that I ascribe the opinion to theoretical farmers alone.

Twenty years' experience, upon a variety of soils, has taught me that all land should be ploughed deep; in the wet season, the rains stand less on the top of the ground, to the injury of the growing crop; in the dry season, the roots strike deeper and suffer less from the drought; for that the roots of wheat or corn reach to the depth of the deepest ploughing will be manifest to any observer. In ploughing poor soils deep for the first time, a top dressing is necessary to give the crop a vigorous start, when the roots will soon reach as far as the ground has been stirred. Your correspondent, "J. A.," says — "Suppose you plough six inches, when your soil is but two, you have now mixed four inches of clay or sand with two of soil, consequently, you have now a predominance of those inferior elements over the productive soil, and deterioration of land is the inevitable consequence." How is this possible? Are we to be told that the roots of the plants will not penetrate four inches of loose earth? And if they do, where is the deterioration in either the land or the crop? All know that land is injured by being exposed naked to the frosts of winter, or the heats of summer. Does it not then naturally follow, that the deeper it is ploughed, the less proportion of the soil is exposed upon the surface to be injured in this way?

"Plough deep, while sluggards sleep,
And you'll have corn to sell and keep."

LEESBURG, VA., 1849. W.

— *Dollar Newspaper.*

GET THE BEST IMPLEMENTS.

MR. EDITOR: There is a species of mongrel economy practised by some farmers, which cannot be too severely deprecated. If they are under the necessity of purchasing a plough, scythe, rake, hoe, or cultivator, instead of searching out the best and most perfectly finished, they inquire for a cheap or medium-priced article, in order to economize their cash.

Now, my experience in purchasing farming implements indicates exactly an opposite course. I inquire for the best, and purchase it. I would no more spend my money for a cheap plough, or harrow, or a cheap wagon — which are always much the dearest in the end — than I would for a cheap school teacher, or a cheap minister. Buy only the best articles; this is the true economy, and all will find it so. — *Germantown Telegraph.*

VALUE OF BONE DUST.

In speaking of the value of bone dust as a manure, Professor Gray says, that "one bushel to a load of yard manure increases its value, as determined by experiment, one half." He estimates that it is "eight or ten times as valuable as cow dung, and the quantity of salts is sixty-six times that contained in an equal quantity of that substance."

LABOR.

I see the man who scorns honest labor. Who clothes him with fine linen, and bids him fare sumptuously every day? On his back is the fleece of the peasant's sheep, sheared by the peasant's strong hand, whitened in the clear flow of the mountain stream, and spun by hands, if not as white, more true and stainless than the crowned queen's! Not a rag of all that curiously wrought, colored, and fashioned gear, which defends him from the keen frost, and scorch of summer, and gives him a grace in the eye of beauty — not a single rag is there, but rises up in judgment, and gives him back scorn for scorn. Fool and drone! He has mistaken the true attitude of man — the heart of the great universe itself. Annul that labor which he scorns, and he stands amid the elements of nature nude as when born. The polished hide which has felt the busy touch of many hands, over which eyes have cried and hearts grown faint, crumbles from his shiftless feet — the bright, fair cloth, in its thousand forms, vanishes from his shrinking limbs — and the great inheritance of brick and mortar, the broad, fruitful lands sprung from the brain of genius and the hand of toil, and bequeathed to that miserable heir of humanity by hard, honest thrift, fly back into their wilderness being, and the proud foot occupant stands possessionless and alone. Who now will minister to his wants? who kindle even on the rudest cabin hearth a fire to stay the pitiless finger of the storm? All-charitable Nature moulds not herself into palaces and ingots, and slaves rise not at the beck of imperious will. Ah, thou man, who scornest labor, look around and see that there is yet some dignity and beauty in toil; that she has compassed some oceans, bridged rivers, delved in mines, and founded empires and practical religion in defiance of the taunt. Her giant will is busied with loftier thought than scorning thee as thou deservest! Let her reproof and thy scourge be that thou art condemned by God and man; by God, who scorns not to build for himself a universe, clothe himself about with angels and hovering glories — by man, proud of his power to exalt the image and imitate the example of God. — *Nineteenth Century.*

WIRE FENCE.

At request, I send you a description of a wire fence we have been building, and the cost of the various items used in its construction.

The wire used was No. 9, weighing one pound per rod. The posts are cast iron, three feet six inches high, besides a dowel of two and one half inches in length and one and one quarter inches in diameter, inserted in stone, and weighing about eleven pounds each. We first built a wall, three feet wide and eighteen inches high, placing large stones for receiving posts, at the distance of twelve and one half feet. This will guard against geese and swine, and attract the notice of larger animals, that they may not run against it. Had not the stone been on the ground, we should not have made it quite so heavy.

As the fence separates a permanent meadow from the highway, we set our posts about six inches from the front of the wall. The form of post is tapering to the top, flattened at the sides, and thinnest at the middle — designed to obtain the greatest strength of the iron used. (?) The distance of the first wire from the stone is four inches; then a space of six inches, then seven inches, then nine, and, finally, of twelve inches; the posts rising four inches above the top wire. The holes in the posts were not cast in, but drilled. Every other post we braced with round, half-inch iron, one end clasping the post eighteen inches from the bottom, the other entering the same stone as the post, eighteen inches from it. Midway between the posts, we placed others, of oval iron three quarters of an inch in breadth, drilled, like the others, but not fastened to the stone.

We purchased unannealed wire, but were under the necessity of annealing it before we could use it. This we did in a fire in the open air; and one side of each coil became more pliable than the other, which made it troublesome in putting in. We introduced our wires, five in number, without much trouble, except from our movable posts; one person holding the coil and turning it in his hands. I think the better way would be, to have a reel for this purpose, as the wire would come off more easily, and get less crooked. At each end we had strong, well braced, wooden posts; and fastening the wire to one of them, we strained it tight at the other, by passing it through the post, and then through a cylinder of white oak, about two inches in diameter, and twelve inches in length, which we turn by a carriage wrench, fitted to one end, and an iron rod put through a hole in the other; the rod, being close to the side of the post, was made fast by a nail, to keep the wire straight.

In order to straighten the wire the whole length, we found it necessary, at the same time we strained at the end, to draw on it in various places, as the friction of the posts, and catching in some, would break one end before the other would be straightened. This we effected, by putting sticks through the joinings of the wire, and drawing by hand. After the horizontal wires were drawn tight, we put in No. 15 wire, passing diagonally from the top to the bottom of every post, and crossing in the centre. It may be woven in any desirable form. The whole is painted white, to protect it from the rust, improve its appearance, and attract the attention of cattle.

We have another short piece, which has no wall at the bottom, and is painted brown, which the cattle do not see, and they run into it, much to its injury. The length of this fence is thirty-five rods. The cost was as follows: —

180 lbs. No. 9 wire, at 6 cts.,	$10 80
20 lbs. No. 15 wire, at 8 cts.,	1 60
46 cast iron posts, 529 lbs., at 3 cts.,	15 87
36 lbs. American iron for braces and small posts, at 5 cts.,	1 90
Blacksmith's bill for drilling posts, &c.,	3 83
Paint,	1 00
Labor at wall, &c., 30 days,	30 00
	$65 00

being $1 85 per rod.

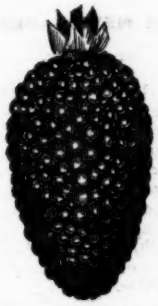
Our experience alone would enable us to construct another at less cost; and by bracing each post, they might be farther apart, without any loss of strength. Many of the processes adopted by us were not original; but as the building of wire fence is yet in its infancy, many parts of our plan may be worthy of adoption.

If any one wishes the fence invisible, let him set the stone for the posts in the ground, and paint the whole green or brown. A short piece of wire fence does not look well, but in our case, it has added so much to the beauty of the field enclosed by it, as to be noticed by every one who sees it.

T. S. GOLD.

West Cornwall, Ct., *Jan.* 25, 1850.
— *Am. Agriculturist.*

Oregon Wheat. — We have seen some samples of wheat grown in Oregon, which, from its quality, deserves a passing comment. The grain is extremely fine, being very round and full, and, compared with that produced in Illinois, or other grain-growing states, has an evident superiority. — *N. O. Pic.*



CULTIVATION OF BLACKBERRIES.

In the days of our boyhood, thousands and thousands of brier bushes impeded the progress of the farmer as he labored to bring the forest into a fruitful field. On removing the forest growth, the brambles succeeded, and were considered no small nuisance, though they often yielded bushels, and sometimes cartloads, of fine fruit, beyond the consumption. At that time, we did not dream of ever cultivating, or recommending the culture, of this then obnoxious bush, as many barelegged and barefooted urchins could testify.

But now our natural or wild fruits have disappeared, and large cities and towns have created a demand for fruits, and those of the highest order command a high price; and among the very best and dearest fruits is the high bush blackberry, so common in Maine, and it may abound in other parts of New England, but in this region, the low bush or running blackberry prevails, which, in Maine, is called the *sour* blackberry, being far inferior to the high bush, both in size and quality.

In Maine, the blackberry grows in all soils, from those that are tolerably moist and very rich, naturally, to the dry and poor. But on light, poor soils, the fruit is smaller and much inferior. The larger the fruit, the better the quality. This fruit abounds in new lands; and after the land has been long cleared up, it flourishes well by the side of walls and fences, among logs, and in and around stone heaps, when it is not molested by more thorough culture and regard to neatness than usually prevail where land is comparatively new and cheap.

From the natural habits of the blackberry, we must infer the mode of culture, in the absence of experiments on this subject; and perhaps some of our readers can give information on the garden culture of this fruit. There is no doubt that it will flourish best in lands that are new, or comparatively so. If cultivated in old gardens, or on lands that have been long under tillage, apply as manure leaves from the forests, also wood ashes and charcoal. Leaves, straw, old hay, and other litter used as *mulching*, would be excellent, especially on dry soils, and save the fruit from the effects of extreme heat and drought.

We recommend the culture of the blackberry in the garden or field, as a matter of trial, both for supplying the family and the market with fruit. As so little has been done in this way, we cannot say whether it will be profitable; but we think it will, for the raspberry, thimbleberry, and other wild fruits, flourish well in the garden.

A few amateurs raise fine blackberries in this vicinity, and we have seen some sold at a dollar a quart box, which were no larger nor better than we have seen in Maine of spontaneous growth. These gentlemen have a particular kind, that are held in high estimation, and we have obtained some of them to try by the side of some which we have procured from Down East. In our native place, we have picked a pint of blackberries from a single bush; and we have stood in one spot, without moving our feet, and picked a quart of as fine fruit as we have ever seen of this, or any other kind of fruit, from the highest cultivation.

The blackberry is a valuable dessert fruit without preparation, or, like many other delicate fruits, it may be used with sugar, cream, &c. In cooking, it may be used in a great variety of ways, in puddings, cakes, pies, tarts, &c., &c. It is the very finest of fruits for vinegar, and in new countries, before orchards are established, and where farmers have not learned to avail themselves of the sap of the maple for vinegar, the blackberry is used for this purpose. We now have some fine blackberry vinegar, which we made a few years ago, from some fruit that was becoming too soft for other purposes. It is of a beautiful rich color, and it retains the peculiar aroma of the fruit. It far excels common vinegar. This fruit may be saved for future use, by making it into jelly or jam.

SETTING FRUIT TREES.

Great care should be taken in selecting fruit trees, in order to procure those that are vigorous and hardy, of good form, and suitable size; and for this northern climate, they should be raised in the north, or in nearly the same latitude. It is of great importance that the trees should be taken up with the greatest care, and well packed. In many cases trees are wrenched forcibly from the ground, with a loss of no small portion of their roots; and sometimes there is a negligence in packing, so that the roots become dry and nearly dead.

Trees should be taken up early, before vegetation commences, and secured by packing or laying in by the heels; and then it may be well to delay setting till the soil is dry enough to be worked conveniently. If any roots are broken, they should be cut off smoothly and the top should be reduced even more in proportion. Even if no roots are lost, it is best to prune off a part of the top, especially when trees are moved in the spring.

Dig large holes 18 or 20 inches deep, unless the land is wet, and first fill in with loam and decomposed sods, to a suitable height, and then plant the tree with the roots extended in their natural position, so that they will be covered only a few inches deep when the earth is levelled. Scatter the subsoil from the bottom of the hole on the surface. Make a basin

around the tree to catch the water; and lay a few stones almost close to the tree, to keep the roots firm in their places, and some sods between the stones and tree, to protect it against the winds. It is much better to *mulch* the trees by laying straw, old hay, sea-weed, or other litter around them, especially the first season, as this keeps the roots cool and moist in dry weather.

If the land has been well prepared by thorough culture, and liberal manuring of previous crops, no manure will be necessary; otherwise, use well decomposed compost, and do not apply that directly to the roots unless well mixed with loam. If coarse manure only can be had, lay it around the tree for mulching, and as it decomposes, it will run down to the roots.

NOTICES OF PUBLICATIONS.

THE POULTRY BOOK, a Treatise on Breeding and General Management of Domestic Fowls; with numerous original Descriptions and Portraits from Life; by John C. Bennett, M. D., Physician and Surgeon. Boston; Phillips, Sampson, & Co. 310 pp. 12mo.

In the execution of this work, the publishers have done themselves much credit. The paper is fine, the typography beautiful, and the engravings are on a liberal scale. We have barely noticed the appearance of the work, and shall delay an opinion of its merits, as we have not had an opportunity to examine it.

REPORT of the Committee of Supervision of the first Exhibition of Poultry, held in Boston, Nov. 1849.

This is a very neat and beautiful pamphlet, containing an account of the different breeds shown, and by whom exhibited, with valuable statistical information, and suggestions on the importance of forming a permanent association for the improvement of domestic fowls. It is embellished with numerous portraits of fowls, which show well on fine paper, with the excellent specimen of Mr. H. L. Devereux's typographic art. Price twenty-five cents. Sold by J. P. Jewett, Redding & Co., Ticknor, A. Bowditch, and Phillips, Sampson, & Co.

THE GRANITE FARMER. — This new paper was received a few weeks ago, but has been neglected as it was mislaid. It is in quarto form, neatly executed, and well filled with interesting and valuable matter. It is under the patronage of the New Hampshire State Agricultural Society. Published at Manchester, by James O. Adams; Thomas R. Crosby, M. D., Editor. Price $1 50 per year. We trust that the intelligent farmers of the Granite State will give this paper a liberal support.

AMERICAN INDUSTRY AND SKILL. — It is said that the new Pasha of Egypt has ordered a set of elegant equipages to be built for him in the United States, to be ready during the spring.

THE NEWSPAPER.

BY CRABBE.

Lo! there it comes before the cheerful fire,
Damp from the press its smoking curls aspire
(As from the earth the sun exhales the dew,)
Ere we can read the wonders that ensue;
Then eager, every eye surveys the part
That brings the favorite subject to the heart;
Grave politicians look for facts alone,
And gravely add conjectures of their own;
The sprightly nymph, who never broke her rest
For tottering crowns or mighty lands oppressed,
Finds broils and battles, but neglects them all
For songs and suits, a birthday or a ball.
The keen, warm man o'erlooks each idle tale
For "moneys wanted" and estates on sale,
While some with equal minds to all attend,
Pleased with each part, and grieved to find an end.
To this all readers turn, and they can look
Pleased on a paper, who abhor a book;
Those who ne'er deigned their Bible to peruse
Would think it hard to be denied their news;
Sinners and saints, the wisest with the weak,
Here mingle tastes, and one amusement seek.
This, like a public inn, provides a treat,
Where each promiscuous guest sits down to eat;
And such this mental food as we may call,
Something to all men, and to some men all.

THE OLIO.

WHAT THEY SIT FOR. — A Quaker, who was examined before a court, not using any other language than "thee" and "friend," was asked by the presiding judge, —

"Pray, Mr. ——, do you know what we sit here for?"

"Yes, verily do I," said the Quaker; "three of you for two dollars each a day, and the fat one on the right for one thousand dollars a year."

A wager was laid on the Yankee peculiarity to answer one question by asking another. To decide the bet a Down-Easter was interrogated.

"I want you," said the bettor, "to give me a straightforward answer to a plain question."

"I kin du it, mister," said the Yankee.

"Then why is it New Englanders always answer a question by asking one in return?"

"*Du they?*" was Jonathan's reply.

"We praise men for fighting," says a caustic writer, "and punish children for doing the same."

If you are too poor to own a garden, buy a tub and fill it with earth, and cultivate a rose bush or a dahlia bulb.

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